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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/904,103	07/11/2001	Walt Fant	CALIP005/P050	1326

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EXAMINER
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CURTIS, CRAIG

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/904,103	<b>Applicant(s)</b> FANT ET AL.	
	<b>Examiner</b> Craig Curtis	<b>Art Unit</b> 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## DETAILED ACTION

### *Disposition of the Instant Application*

- This Office Action is responsive to Applicants' Amendment filed on 19 December 2003, which has been made of record in the file.
- By this Amendment, Applicants have amended claim 7.
- Claims 1-19 presently are pending in the instant application.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 1-5, 11, and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' Admitted Prior Art in view of Douklias (3,776,616).**

**With regard to claims 1 and 11,** Applicants' Admitted Prior art discloses the invention as claimed--an optical switching apparatus and method (See Fig. 1 in Instant Application), comprising:

a plurality of optical input switches (116, 118, 120);

a plurality of optical output switches (136, 138, 140);

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a plurality of central optical switches (108, 112) connected between the plurality of input switches and plurality of output switches; and

a plurality of test light sources (i.e., the light sources that supply light to ingress fibers 124, 126, 128, etc.), where each test light source is connected to an optical input switch (See Fig. 1)--  
**EXCEPT FOR** an explicit teaching wherein a first plurality of optical detectors is connected to said optical output switches.

Douklis, however, teaches a first plurality of optical detectors (optical sensing means 7 in Fig. 1) connected to optical output switches (optical switches 6: col. 3, ll. 11-15).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the invention disclosed in Applicants' Admitted Prior Art such that it further comprise a first plurality of optical detectors connected to said optical output switches, as explicitly taught by Douklis, for at least the purpose of achieving, in an efficient manner, an optical switching apparatus and method that could alert either an observer or components associated with said apparatus and method in the event of a malfunction in same.

With regard to claims 2-5 and 15-19, the combination teaches all of the claimed limitations in a manner identical with that disclosed in said claims of the instant application (See above & cf. Fig. 1 (i.e., Applicants' Admitted Prior Art) with Fig. 4 of the instant invention).

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**2. Claims 6-10 & 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' Admitted Prior Art in view of Baker (4,913,509), as applied above to, inter alia, claims 1 & 2, and further in view of Sato (JP 0279890 A) and Stone (5,771,320).**

The combination discloses the invention as claimed **EXCEPT FOR** an explicit teaching wherein said optical switching apparatus and method further comprises a controller connected to each of said plurality of optical input switches, wherein said controller determines if one of the plurality of optical switches is malfunctioning, and wherein, with specific reference to claim 7, at least one of [the or said] plurality of central optical switches is an active optical switch and at least one of the plurality of central optical switches is an [read: a] protection optical switch which acts as a back up for the active optical switch, by simultaneously using input signals, which are not generated by the test light sources, to test the active optical switch and the test light sources to test the protection optical switch.

Sato, however, discloses a controller (24) connected to each of a plurality of optical input switches (See ABSTRACT, PROBLEM TO BE SOLVED, SOLUTION, and Figs. 1 & 3-5), wherein said controller determines if one of the plurality of optical switches is malfunctioning, and Stone discloses a teaching wherein at least one of a plurality of central optical switches (gratings 20, 25) is a protection optical switch that acts as a back up for said active optical switch, by simultaneously using input signals, which are not generated by the test light sources, to test the active optical switch and the test light sources to test the protection optical switch. See Fig. 1. It would have been obvious to

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one having ordinary skill in the art at the time the invention was made to have modified the combination such that it further comprise, as explicitly taught by Sato, a controller connected to each of said plurality of optical input switches, wherein said controller determines if one of the plurality of optical switches is malfunctioning, for at least the purpose of identifying, in an efficient manner, the occurrence of a fault (read: the malfunctioning of one or more optical switches) in said combination, as well as to have configured the optical switching apparatus of the combination such that at least one of a plurality of said central optical switches be a protection optical switch that acts as a back up for said active optical switch, by simultaneously using input signals, which are not generated by the test light sources, to test the active optical switch and the test light sources to test the protection optical switch, as taught by Stone, for at least the purpose of providing redundancy.

### ***Response to Arguments***

3. Applicants' arguments with respect to the claims have been considered but have been rendered moot in view of the new ground(s) of rejection.

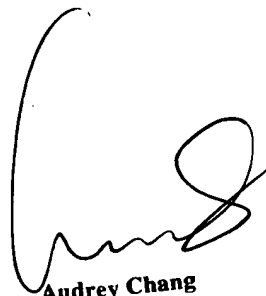
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### ***Contact Information***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Curtis, whose telephone number is (571) 272-2311. The facsimile phone number for Art Unit 2872 is (703) 308-7721.

Any inquiry of a general nature regarding the status of this application should be directed to the Group receptionist, whose telephone number is (703) 308-0956.

*C.H.C.*  
Craig H. Curtis  
Group Art Unit  
8 July 2004

  
Audrey Chang  
Primary Examiner  
Technology Center 2800